## **Abstract**

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Human semaphorin L (H-SemaL) and corresponding semaphorins in other species.

The invention relates to novel semaphorins which are distinguished by a particular domain structure and derivatives thereof, nucleic acids (DNA, RNA, cDNA) which code for these semaphorins, and derivatives thereof, and the use thereof.

The present invention relates to semaphorins which have a novel, as yet undisclosed and unexpected domain structure and which possess a biochemical function in the immune system (immunomodulating semaphorins). The novel semaphorins are referred to as type L semaphorins (SemaL). They comprise an N-terminal signal peptide, a characteristic Sema domain and, in the C-terminal region of the protein, an immunoglobulin-like domain and a hydrophobic domain which represents a potential transmembrane domain.